



## Transport & Ticketing

Future-proof security for any transportation system



## Flexibility, Convenience, Security

### EXAMPLES

- Cards and Tickets for Transportation Schemes
- Event Ticketing
- Ski Ticketing
- Access Control
- Loyalty Schemes

Contactless ICs are changing the way we live, bringing us greater convenience, security and efficiency. Every day, countless people use contactless cards and tickets to commute to work, to enter their offices and to benefit from bonus card programs. In their leisure time, people use contactless technology for enjoyment at ski resorts, entertainment attractions, amusement parks, or for accessing events such as concerts or sports games.

A pioneer in the field since 1983, Infineon has been at the forefront of developments in dedicated contactless security controllers and contactless memories. As the leading supplier of public transport and access control solutions, Infineon has sold over a hundred million contactless ICs.

Infineon delivers high-performing products with outstanding transaction time that range from limited use memories to high-end security dual interface controllers and meet the requirements of different transportation schemes.



## The best product for your application

Infineon offers a comprehensive product portfolio that fulfills all requirements for transport- and ticketing applications. Based on globally agreed standards, the portfolio has demonstrated its merit in countless applications in the field. Proven and reliable, Infineon products deliver the performance you expect at prices you can afford.

Infineon's portfolio is unrivaled: ISO/IEC 14443 based ICs offer outstanding performance for transport & ticketing applications. Infineon's unique offering of microcontrollers enables ISO 14443 Type A/B, ISO 18092 passive mode and Mifare compatibility, CIPURSE™ and NFC compliance on the same silicon. Last but not least, the portfolio is completed by ICs based on ISO 18000-3 that allow higher reading and a portfolio of Secure Application Module for ease of integration into readers and terminals. This not only allows interoperability with almost any 13.56MHz infrastructure worldwide, but also supports a simple migration of existing transport ticketing solutions to more advanced security based on AES.

The most comprehensive product range comprises the my-d move product family for limited use tickets and Mifare compatible products for mid-range segments, and is completed by contactless microcontroller products for extended use, particularly in multiapplication cards combining applications such as micropayments and loyalty.

The high-end ticket market requires smart card controller performance and security (e.g. open payment banking cards accepted for ticketing application). Infineon supports this segment with an excellent choice of Common Criteria certified contactless and dual interface security controllers.

Reflecting its commitment toward open standards, Infineon is a founding member of the OSPT (Open Standard for Public Transportation) Alliance that has chosen CIPURSE™ as the standard to enable the transit community to move toward the next generation of secure, cost-effective, and flexible fare collection solutions through a global, multi-provider community.





## Convenience and security for busy lives



CIPURSE™ – The Open Standard for Public Transport

- Defines a feature set that allows the set up of dedicated applications
- Based on ISO 7816
- Defines
  - Authentication scheme based on AES128
  - Secure messaging protocol
  - Minimum mandatory file types
  - Minimum mandatory command set to access these file types
- RF Layer agnostic

### PUBLIC TRANSPORT

Investments in public transport infrastructure will increase globally over the next years with the aim of providing infrastructure that is high-quality, accessible and affordable. The transportation ticketing market will be one of the fastest-growing markets for chip card ICs. The most prominent requirements of this market are cost of implementation, interoperability and security.

Infineon's commitment toward CIPURSE™ compliant products is integrated in a portfolio that allows the ticketing market to benefit from lowest possible investment costs on the infrastructure side, as well as the lowest possible bill of material. This is realized by a broad portfolio of CIPURSE™ compatible ICs from limited used ticket ICs, to ICs ideal for migrating existing infrastructure, ICs for multiapplication cards and secure elements. CIPURSE™ compliant products provide an advanced security layer for future-proof transportation and ticketing, and are also an optimized platform to base national schemes on.

Infineon supports the innovative security concept incorporated in the new standard for public transport – the CIPURSE™ standard. CIPURSE™ is the truly open standard chosen by the OSPT Alliance for future transportation and ticketing systems with advanced security. End users, transport operators and agencies can rely on a broad supplier base in a highly competitive component market by being able to contribute to any future evolution. CIPURSE™ was selected by the OSPT Alliance as security standard for Transport & Ticketing and is supported by all members of the alliance:



By implementing the truly open standard CIPURSE™ Infineon will support the OSPT Alliance in creating a new security solution for next-generation smart card based public transport applications.

CIPURSE™ brings a number of key benefits to both public transport agencies and smart card industry players, including better performance and advanced system security for public transport applications, along with the availability of multiple sources for chip products.

Overall, Infineon modules will address future transport schemes based on international standards and open specifications by featuring the truly open standards for public transport, such as CIPURSE™.

## Ask Infineon. Get connected with the answers.

Where you need it. When you need it.

Infineon offers its toll-free 0800/4001 service hotline as one central number, available 24/7 in English, Mandarin and German.

Our global connection service goes way beyond standard switchboard services by offering qualified support on the phone. Call us!

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- China, mainland ..... 4001 200 951 (Mandarin/English)
- India ..... 000 800 4402 951 (English)
- USA ..... 1-866 951 9519 (English/German)
- Other countries ..... 00\* 800 951 951 951 (English/German)
- Direct access ..... +49 89 234-0 (interconnection fee, German/English)

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